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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,765	12/07/2005	Ikuo Yamamoto	Q91901	8041
23373	7590	05/20/2008		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER	
			PENG, KUO LIANG	
			ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			05/20/2008 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/559,765

**Applicant(s)**

YAMAMOTO ET AL.

**Examiner**

Kuo-Liang Peng

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/6/08 Response/Amendment.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.  
4a) Of the above claim(s) 12 and 13 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-11, 14-16 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/003)  
Paper No(s)/Mail Date 11/1/06, 6/28/06, 12/7/05  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's election without traverse of the invention of Group I (Claims 1-11 and 14-16) in the response to restriction requirement filed March 6, 2008 is acknowledged.
2. Claims 12-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse, *supra*. Now, Claims 1-11 and 14-16 are pending for consideration.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 2-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 2 (line 2), “comprises” causes confusion because the fluoropolymer cannot contain **unreacted** monomers. (Emphasis added)

*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 5-6, 10-11 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Inukai (US 5 128 389).

Inukai discloses a coating (i.e., **surface treatment**) composition comprising a fluoropolymer derived from a **fluorine-containing  $\alpha$ -fluoro/chloro acrylate** represented by formula (I), a **silicone-containing** monomer and a **silicon and fluorine-free** monomer. (col. 1, line 51 to col. 4, line 20) The amounts of the forgoing monomers are described in col. 3, lines 42-58 and Examples. The composition can be employed in a solution form. (Examples)

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject

matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-11 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP472 (JP 63-101472) in view of Ohmori (US 5 021 501).

JP472 discloses a surface treatment agent for **fabrics** made of synthetic or natural fibers comprising 1) a fluorine-containing water/oil repellant and 2) a polysiloxane. (page 2, upper right column to lower right column and page 3, lower right column) The amount of the polysiloxane is illustrated in Examples. The fluoro-containing water/oil repellent is derived from a **fluoroacrylate**, a vinyl-containing **siloxane monomer** and a **fluorine/silicon-free** monomer. (page 2, lower right column to col. 3, upper left column) JP472 is silent on the employment of the claimed  **$\alpha$ -substituted** fluoroacrylate. However, Ohmori teaches the use of, in composition A), a fluoropolyacrylate prepared from a monomer mixture containing an  **$\alpha$ -substituted** fluoroacrylate represented by formula (1) in a water/oil repellent composition (Composition B) for treating **carpet, fabrics (textiles)** such as skirts, curtains, etc. (col. 1, lines 29-50, col. 2, line 25 to col. 3, line 13 and col. 7, lines 24-44). Additional monomer such as  $\text{CH}_2=\text{C}(\text{CH}_3)\text{COO}-\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_3)_3$  can be included in the monomer mixture. (col. 3, lines 6-

19) The amounts of these two components are described in col. 3, lines 33-38.

Ohmori further teaches the use of , in composition B, a fluoropolyacrylate prepared from a monomer mixture containing i) an  **$\alpha$ -substituted** fluoroacrylate containing **trimethylsilyl** or **trimethylsilylpropyl** group represented by formula (3), ii) an  **$\alpha$ -substituted** fluoroacrylate represented by formula (4), and iii) an monomer free of fluorine and silicone such as ethylene, propylene, acrylates, methacrylates, in a water/oil repellent composition for treating **carpet, fabrics (textiles)** such as skirts, curtains, etc. The amounts of the components are also illustrated. (col. 1, line 51 to col. 2, line 18, col. 3, lines 1-19, col. 3, line 57 to col. 5, line 50 and col. 7, lines 24-44) The motivation for utilizing the specific  **$\alpha$ -substituted** fluoroacrylates is to afford tough coatings exhibiting **superior adhesion** to the article to be treated as compared to the conventional water/oil repellent compositions. (col. 1, lines 23-26 and col. 7, lines 37-44) In light of the benefit, it would have been obvious to incorporate Ohmori's fluoropolyacrylate into JP472's composition with expected success. Especially, Ohmori is in the same field as that of JP472's endeavor. The amounts of components A) and B)

The Abstract of JP472 is attached for Applicants' convenience. Its English translation has been ordered by Examiner and will be available later upon request.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck, can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp  
May 15, 2008

/Kuo-Liang Peng/  
Primary Examiner, Art Unit 1796